RESPONSE UNDER 37 C.F.R. 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 3736
Due Date: May 31, 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	William P. Van Antwerp et al.	Examiner:	Eric Frank Winakur
Serial No.:	09/934,390	Group Art Unit:	3736
Filed:	August 21, 2001	Docket:	G&C 130.15-US-D1
Title:	DETECTION OF BIOLOGICAL MOLECULES USING CHEMICAL AMPLIFICATION AND OPTICAL SENSORS		

CERTIFICATE OF MAILING OR TRANSMISSION UNDER 37 CFR 1.8

I hereby certify that this correspondence is being sent via facsimile transmission to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on May 14, 2004.

By: _____
Name: William J. Wood

AMENDMENT UNDER 37 C.F.R. §1.116

MAIL STOP AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Office Action dated March 31, 2004, which was made final, please enter the following amendments in the above-identified application.

Please
Enter
6/14/04

IN THE CLAIMS

Please cancel claims 34, 35, 40, 41, 47 and 48, amend claims 21, 37 and 44, and add new claim 51 as follows:

1-20. (CANCELLED)

Please Enter 6/10/04

21. (CURRENTLY AMENDED) A system comprising a biocompatible polymer matrix and an amplification component incorporated within the biocompatible polymer matrix that is capable of producing a polyhydroxylated analyte signal upon interrogation by an optical system, wherein said amplification component is covalently attached to said biocompatible polymer matrix and requires a photo-induced electron transfer for production of said signal, and further wherein said biocompatible polymer matrix is permeable to glucose.

22. (ORIGINAL) The biocompatible polymer matrix in accordance with claim 21, wherein said biocompatible polymer matrix is a solid substrate.

23. (ORIGINAL) The biocompatible polymer matrix in accordance with claim 22, wherein said solid substrate is a member selected from the group consisting of polyurethane, silicon, silicon-containing polymer, chronoflex, P-HEMA or sol-gel.

24. (ORIGINAL) The biocompatible polymer matrix in accordance with claim 21, wherein said biocompatible polymer matrix comprises a hydrophilic polymer.

25. (ORIGINAL) The biocompatible polymer matrix in accordance with claim 21, wherein said biocompatible polymer is a member selected from the group consisting of a polyurethane, a silicone, an acrylic, and a silicone containing polyurethane.

26. (ORIGINAL) The biocompatible polymer matrix in accordance with claim 21, wherein said biocompatible polymer matrix is a member selected from the group consisting of a disk, a cylinder, a patch, a microsphere and a refillable sack.